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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/771,595

01/30/2001

Peter Hossel

51186

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26474

7590

09/17/2008

NOVAK DRUCE DELUCA + QUIGG LLP

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EXAMINER

SOROUGH, LAYLA

ART UNIT

PAPER NUMBER

1617

MAIL DATE

DELIVERY MODE

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 09/771,595	<b>Applicant(s)</b> HOSSEL ET AL.	
	<b>Examiner</b> LAYLA SOROUGH	<b>Art Unit</b> 1617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 18 June 2008.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-4, 10-14 and 16-26 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-4, 10-14 and 16-26 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

***DETAILED ACTION***

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on June 18, 2008 has been entered. Claims 1-4, 10-14 and 16-26 are pending.

See rejections below:

***Claim Rejections - 35 USC § 103***

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 1-4, 10-14 and 16-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dieing et al. (EP 0 893 117, translation) in view of either Yamada et al. (US 6936241 B2) or Eteve et al. (US 5,643,557).

Dieing et al. teach cationic crosslinked polymers for use in cosmetic compositions, in particular in hair care compositions such as hair lotions, rinses, emulsions, sprays and shampoos, said polymers comprising 1-99.99% of a cationic or quaternized monomer such as 3-methyl-1-vinylimidazolium methyl sulfate and 0-98.99% of a water-soluble monomer such as N-vinylpyrrolidone. See Translation at pp. 4-6. N,N'-divinylethylenurea can be used as a crosslinking agent. See Translation at p. 5; p. 7; Example 3. The polymers of Dieing et al. are obtained by the same method of free-

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radical initiated solution polymerization as recited in the instant claims. See Translation at p. 5. Dieing et al. teaches that along with the polymers and solvents, the cosmetic hair preparations can also contain conventional cosmetic ingredients. See Translation at p. 6. With respect to Claims 24 and 25, the compositions of Dieing et al. contain 0.01-5% of the cationic crosslinked polymer, which is within the claimed range. See p.7.

Dieing et al. do not explicitly teach the UV filters of the instant claims.

However, Eteve et al. teach using coated or uncoated metallic oxide pigments (e.g. titanium dioxide, zinc oxide, cerium oxide or zirconium oxide) having an average size of less than 100 nm in haircare and skincare compositions for the protection of epidermis or hair against UV rays. See Abstract; col. 1, line 59 – col. 3, line 65. Similarly, Yamada et al. teaches among UV protecting agents, inorganic UV protecting agents such as titanium dioxide and zinc oxide can be coated by one or more coating materials for providing a variety of properties to the inorganic UV protecting agents, for example, for providing hydrophobicity to the surface of the inorganic UV protecting agents, for providing a greater net charge than the zeta potential of the inorganic UV protecting agents, and for providing both hydrophobicity and a greater net charge. The coating materials which provide hydrophobicity to the surface of the inorganic UV protecting agents include, for example, silicone, fluorine, metallic soap, and fatty acid. Hydrophobically coated inorganic UV protecting agents are preferably used in the present invention in view of providing effective UV protecting benefit. Commercially available hydrophobically coated inorganic UV protecting agents useful herein include, for example, methicone and aluminium hydroxide treated micro titanium dioxide with a

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tradename SI-TTO-S-3-Z LHC available from Miyoshi Kasei, dimethicone and myristic acid treated micro zinc oxide with a tradename SAMT-UFZO-450 available from Miyoshi Kasei, and dimethicone treated micro zinc oxide with a tradename Z-Cote HP-1 available from BASF. The compositions of both Yamada et al. and Eteve et al. may contain conventional organic UV sunscreens. See Examples.

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the hair care compositions of Dieing et al. such that to employ inorganic UV filters of either Yamada et al. or Eteve et al. One having ordinary skill in the art would have been motivated to do this to obtain compositions that would protect hair and skin from UV radiation as suggested by either Yamada et al. or Eteve et al. With respect to Claim 17 and Claim 20, when the compositions of Dieing et al. in view of either Yamada et al. or Eteve et al. are applied to hair, they are applied to the skin (scalp).

Therefore, the invention as a whole would have been *prima facie* obvious to one of ordinary skill in the art at the time the invention was made.

### ***Response to Arguments***

Applicant's arguments filed on June 18, 2008 and July 1, 2008 have been considered.

In response to Applicants arguments regarding KSR, the Examiner states the Court has held that "the test of obviousness is not express suggestion of the claimed invention in any or all of the references but rather what the references taken collectively would suggest to those of ordinary skill in the art presumed to be familiar with them."

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See *In re Rosselet*, 146 USPQ 183, 186 (CCPA 1965). "There is no requirement (under 35 USC 103(a)) that the prior art contain an express suggestion to combine known elements to achieve the claimed invention. Rather, the suggestion to combine may come from the prior art, as filtered through the knowledge of one skilled in the art." *Motorola, Inc. v. Interdigital Tech. Corp.*, 43 USPQ2d 1481, 1489 (Fed. Cir. 1997). An obviousness determination is not the result of a rigid formula disassociated from the consideration of the facts of a case. Indeed, the common sense of those skilled in the art demonstrates why some combinations would have been obvious where others would not. See *KSR Int'l Co. v. Teleflex Inc.*, 82 USPQ2d 1385 (U.S. 2007) ("The combination of familiar elements according to known methods is likely to be obvious when it does no more than yield predictable results.").

Applicant's arguments with respect to *Dupuis et al.* have been considered but are moot in view of the new ground(s) of rejection. However, the rejection will be discussed below:

Applicant argues that *Dupuis et al.* include metal particles that are coated with hydrophilic agents, e.g. MT-100SA and MT-150W. Examiners contention is that *Dupuis et al.* also includes coating that are hydrophobic, i.e. SUNVEIL. However, Applicant's amendment limiting the metal oxide particles to zinc oxides necessitated the new grounds of rejection presented in this Office action.

Applicants arguments are not persuasive.

## Conclusion

No claims allowed.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Layla Soroush whose telephone number is (571)272-5008. The examiner can normally be reached on Monday through Friday from 8:30 a.m. to 5:00 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sreenivasan Padmanabhan, can be reached on (571) 272-0629. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/SREENI PADMANABHAN/

Supervisory Patent Examiner, Art Unit 1617